

ABSTRACT OF THE DISCLOSURE

A LIFO type data storage device of  $2^N$  depth, N being an integer, includes two random access memories each having at least  $2^{N-1}$  locations for storing data. A controller  
5 controls the reading and writing of data in one or the other of the two memories, or the direct transmission of data to multiplexing means. Outputs of the two memories are also connected to the multiplexing means and the output of the device is connected to the multiplexing means via  
10 a sampler.